

Stantec Analytical Validation Checklist**Report No. SDG#ASY10**

Project Name: Amtrak Wilmington	Project Number: 213402048	
Stantec Validator: Patrick Vaughan/Steve Alberts	Laboratory: Eurofins/Lancaster Laboratory	
Date Validated: 07/11/2013	Laboratory Project Number: 1386528	
Sample Start-End Date: 04/29/2013	Laboratory Report Date: 5/29/2013	
Parameters Validated: PCBs (8082) w/ microwave soil extraction and moisture.		
Samples Validated: <u>SB-92 (4.0-6.0)</u> (composite soil); <u>SB-90 (0.0-2.0)</u> (composite soil); <u>SB-90 (0.0-2.0) MS</u> (composite soil); <u>SB-90 (0.0-2.0) MSD</u> (composite soil); <u>SB-DUP-3</u> (composite soil); <u>SB-90 (2.0-4.0)</u> (composite soil); <u>SB-90 (4.0-6.0)</u> (composite soil); <u>SB-62 (0.0-2.0)</u> (composite soil); <u>SB-62 (2.0-4.0)</u> (composite soil); and <u>SB-62 (4.0-6.0)</u> (composite soil).		
VALIDATION CRITERIA CHECK		
Validation Flags Applicable to this Review: U The analyte was analyzed for, but not detected above the reported sample quantitation limit. J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. B The analyte was detected in the method, field, and/or trip blank. R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.		
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	Yes X	No
Comments: None		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes	No X
Comments: None		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments: None		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments: Sample receipt log indicates that sample time listed on sample containers did not match COC. <u>SB-81 (0.0-2.0)</u> time = 1418, <u>SB-81 (2.0-4.0)</u> time = 1430 and <u>SB-76 (4.0-6.0)</u> time = 1254. These samples were included in analytical report ASY06; refer to data verification form ASY06. No corrective action required.		
5. Were sample holding times met?	Yes X	No
Comments: None		

6.	Were correct concentration units reported?		Yes X	No
Comments: None				
7.	Were detections found in laboratory blank samples?		Yes	No
Comments: Not applicable, no blanks analyzed as part of this report.				
8.	Were detections found in field blank, equipment rinse blank, and/or trip blank samples?		Yes	No X
Comments:				
9.	Were instrument calibrations within method criteria?	NA	Yes X	No
Comments: Pesticide Residue Analysis: the initial or continuing calibration response was outside acceptance criteria on one column but within acceptance criteria on the second. The affected analytes were reported only from the compliant column. No corrective action required. Raw data identifies which column was used.				
10.	Were surrogate recoveries within control limits?		Yes	No X
Comments: <u>Pesticide Residue Analysis</u> : PCB surrogate recoveries outside limit for sample SB-62 (0-2 composite soil). Recovery resulted from sample dilution and no corrective action required.				
11.	Were laboratory control sample(s) (LCS/LCSD) sample recoveries within control limits?		Yes X	No
Comments: Lab did not report LCSD data.				
12.	Were matrix spike (MS/MSD) recoveries within control limits?	NA	Yes X	No
Comments:				
13.	Were RPDs within control limits?		Yes X	No
Comments:				
14.	Were dilutions required on any samples?		Yes X	No
Comments: Seven samples required dilution prior to analysis, with dilution factors ranging from 5X to 2000X. Sample reporting limits were adjusted accordingly. No data were qualified.				
15.	Were Tentatively Identified Compounds (TIC) present?		Yes	No X
Comments:				
16.	Were organic system performance criteria met?	NA	Yes X	No
Comments:				
17.	Were GC/MS internal standards within method criteria?	NA	Yes X	No

Comments:			
18. Were inorganic system performance criteria met?	NA X	Yes	No
Comments:			
19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results.		Yes	No X
Duplicate Sample ID	Primary Sample No.		
SB-Dup-3	SB-90(0.0-2.0)		
Comments: Aroclor 1260 was detected in both samples. The RPD calculated was within project acceptance criteria (5.7%). All other Aroclors were non-detect in both samples.			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials KEF
Comments:			
21. Other?		Yes	No X
Comments:			
PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT			
Precision:	Acceptable X	Unacceptable	Initials
Comments: Based on laboratory spike data for LCS.			
Sensitivity:	Acceptable X	Unacceptable	Initials
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials
Comments: Based on laboratory spike data for LCS.			
Representativeness:	Acceptable X	Unacceptable	Initials
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials
Comments:			